



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/892,784

06/27/2001

Frank Bahren

Westphal.6311

9616

50811 7590 05/29/2007
O'SHEA, GETZ & KOSAKOWSKI, P.C.
1500 MAIN ST.
SUITE 912
SPRINGFIELD, MA 01115

EXAMINER

CHANKONG, DOHM

ART UNIT

PAPER NUMBER

2152

MAIL DATE

DELIVERY MODE

05/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/892,784	Applicant(s) BAHREN ET AL.	
	Examiner Dohm Chankong	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 14-21 and 24-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 14-21 and 24-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2152

DETAILED ACTION

- 1> This action is in response to Applicant's response filed 3.2.2007. Claims 11, 21 and 28 are amended. Claims 11, 14-21 and 24-30 are presented for further examination.
- 2> This is a final rejection.

Response to Arguments

- I. §101 REJECTION OF CLAIMS 11 AND 21 FOR BEING DIRECTED TO NON-STATUTORY SUBJECT MATTER ARE MAINTAINED BECAUSE THE CLAIMED SUBJECT MATTER IS FUNCTIONAL DESCRIPTIVE MATERIAL.

Applicant disputes the §101 rejections set forth in the previous action. The §101 rejections are maintained for claims 11 and 21 but for a different reason than those stated in the previous action. Claims 11, 21 and 28 were originally rejected under §101 for being directed to non-functional descriptive material. Claims 11 and 21 are now rejected for being directed towards functional descriptive material. Claim 28 is found to be statutory because it recites hardware that employs the data telegram and does not merely claim the telegram *per se*.

Both functional and non-functional descriptive material are nonstatutory when claimed as descriptive material *per se* (emphasis added). MPEP §2106.01 citing In re Warmerdam, 33 F.3d 1354, 1360. When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory and should be rejected under 35 U.S.C. 101 (emphasis added). Id.

Functional descriptive material consists of data structures and computer programs which impart functionality when employed as a computer component: Id. Nonfunctional

Art Unit: 2152

descriptive material includes but is not limited to music, literary works, and a compilation or mere arrangement of data. Id. Functional descriptive material however can be saved from statutory oblivion if it is recorded on some computer-readable medium because it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. See id.

Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. MPEP §2106.01(I) citing Warmerdam, 33 F.3d at 1361 (claim to a data structure *per se* held nonstatutory). In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Id.

Here, Applicant's claims 11 and 21 are directed to a data telegram *per se* as they are not being claimed as part of a computer readable medium. Because the claims do not claim the telegram as part of a computer-readable medium, they do not fall into a statutory category of invention and therefore are not statutory. However, because the claims discuss a header that determines how the body of data is formatted, Applicant's claimed data telegram meets the definition of a data structure as set forth in the MPEP. Therefore, the claims are directed to functional descriptive material. Applicant can overcome this §101 rejection by claiming the data telegram as part of a computer readable medium which would render the claimed subject matter statutory.

As a side note, Applicant's focus on the practical application test and the useful, concrete and tangible result test is misplaced. These tests are applied when the claims are directed towards one of the judicial exceptions for statutory subject matter which include an abstract idea, a law of nature or a natural phenomena. See MPEP §2106(IV)(C). Since Applicant's claimed data telegram is not considered to be an abstract idea, a law of nature or a natural phenomena, neither test is applicable.

II. §101 REJECTIONS OF CLAIMS 21 AND 24-30 FOR FAILING TO COMPLY WITH THE ENABLEMENT REQUIREMENT IS WITHDRAWN.

Applicant's remarks with respect to the §101 rejection for failing to comply with the enablement requirement have been considered and are persuasive. As such, these rejections are withdrawn.

III. THE §103 REJECTION OF CLAIMS 11, 14, 18 AND 20 UNDER JHA ARE MAINTAINED.

Applicant argues that Jha fails to disclose a host data standard. However, Jha's discloses a SONET network and a SONET protocol [column 1 «lines 24-35»]. The SONET network and protocol are analogous to the host network and host networking standard claimed by Applicant; they are analogous to Applicant's disclosure of a MOST network and a MOST protocol.

Jha discloses a data telegram that is formatted according to the SONET protocol but that is capable of carrying data formatted according to an extraneous standard that is different from the host SONET protocol [column 7 «lines 39-49» where : the SONET frame might include data formatted according to ATM, IP, PPP or Frame Relay]. Based on the foregoing, Applicant's arguments are not persuasive. The rejections of claims 11, 14, 18 and 20 are therefore maintained.

Art Unit: 2152

IV. THE §103 REJECTION OF CLAIMS 21, 24-26 AND 28-30 UNDER THE MOST SPECIFICATION AND JHA ARE MAINTAINED.

Applicant argues that the MOST spec does not describe with specificity how the MOST network can be used in conjunction with a number of different protocols. The MOST spec clearly provides a means of achieving this goal in describing the structure of the MOST frame that is transported within the MOST network [section 6, pgs. 32-35]. Much like Applicant's claimed data telegram, the MOST frame consists of different sections allocated for different standards; one frame may consist of a section allocated to protocols requiring synchronous transport while another section is allocated for protocols that require asynchronous transport [section 6.5, pg. 33]. For instance, computer packet data transport for computer peer-to-peer communication would utilize the frame section allocated for asynchronous data transport [section 6.8.3, pg. 35].

Jha supplements the MOST spec's teachings. Jha's SONET network is analogous to the MOST network described in the MOST spec. Jha more clearly discloses the implementation of a data telegram with a specific structure that would enable the transmission of data packets that are not in accordance with the underlying host network. For the forgoing reasons, Applicant's arguments are not persuasive. The rejection of claims 21, 24-26 and 28-30 are therefore maintained.

Claim Objections

3> Claims 29 and 30 are objected to under 37 CFR 1.75(c), as being improper dependent claims. Any claim which is in dependent form but which is so worded that it, in fact is not, as, for example, it does not include every limitation of the claim on which it depends, will be

Art Unit: 2152

required to be *canceled* as not being a proper dependent claim; and cancellation of any further claim depending on such a dependent claim will be similarly required (emphasis in the original). MPEP §608.01(n)(II). The test as to whether a claim is a proper dependent claim is that it shall include every limitation of the claim from which it depends (35 U.S.C. 112, fourth paragraph) or in other words that it shall not conceivably be infringed by anything which would not also infringe the basic claim. MPEP §608.01(n)(III).

Here, claims 29 and 30 merely are directed to a data telegram but are dependent on a claim that is directed to a multimedia system, a plurality of multimedia devices and a network. Claims 29 and 30 therefore fail to include every limitation of the claim from which they depend. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. MPEP §608.01(n)(II).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4> Only those claims that have amended by Applicant are formally addressed in this action. The text of those sections not included in this action can be found in a prior Office action, see previous rejections, filed 3.3.2006 and 11.27.2006.

5> Claims 11, 14, 18 and 20 are rejected under 35 U.S.C § 103(a) as being unpatentable over Jha, U.S Patent No. 6.771.663.

6> As to claim 11, Jha discloses a data telegram for transmitting data within a host network having a standard for the transmission of the data within the host network, the data telegram comprising:

a data section having a pair of regions, one region in the pair of regions containing data formatted in a first instance in accordance with an extraneous standard that is different than the host network standard, the first region containing data formatted in a second instance in accordance with the host network standard [Figure 7 | Figure 9 «item 274» | column 5 «lines 52-55» | column 7 «lines 39-60» where: the host network utilizes a SONET protocol. Jha discloses that the SONET packet contains a SONET payload (first region) that contains data formatted in a variety of protocols (second region that is within the first region)]; and

a header section that contains information specifying that the data within the first region of the data section are formatted in the first instance according to the extraneous standard and specifying that the data within the first region of the data section are formatted in the second instance according to the host network standard, where a second region in the pair of regions in the data section contains header information in the first instance associated with the extraneous standard specified by the information in the header section and in the second instance associated with the host network standard specified by the information in

Art Unit: 2152

the header section, where a telegram identification portion of the header section that specifies an identification of data associated with the host network standard when the data in the first region of the data section is formatted in accordance with the host network standard in the second instance contains an identification of data associated with the extraneous standard in the first instance [Figure 7 «items 204a, 204b, 204c» | column 5 «line 67» to column 6 «line 5» | column 7 «lines 39-60» | column 9 «lines 55-60» | Figure 11 «item 302» | column 11 «lines 26-37»].

Jha also discloses a telegram length portion of the header section that specifies a length of the data associated with the host network standard when the data in the first region of the data section is formatted in accordance with the host network standard in the second instance [column 7 «lines 61-65» | column 10 «lines 27-30»] but does not expressly disclose that the portion no longer specifies the length of the data associated with the host network standard when the data in the first region of the data section is formatted in accordance with the extraneous standard.

However, this functionality is implied by Jha's disclosure. Jha discloses that the data in the data section of the telegram may be formatted in accordance with both host or extraneous standards [column 11 «lines 26-37»]. Thus, when the data is in accordance with the extraneous standard, the length portion specifies the length of the data of the extraneous standard and not the host standard. Therefore Jha implicitly discloses that the telegram length portion no longer specifies the length of the data associated with the host network standard when the data in the first region of the data section is formatted in accordance with the extraneous standard.

7> Claims 15 and 16 are rejected under 35 U.S.C § 103(a) as being unpatentable over Jha, in view of the MOST Specification Framework Rev. 1.1 ["MOST spec"].

8> Claims 17 and 19 are rejected under 35 U.S.C § 103(a) as being unpatentable over Jha, in view of in view of Flanders et al, U.S Patent No. 6.172.980 ["Flanders"].

9> Claims 21, 24-26 and 28-30 are rejected under 35 U.S.C § 103(a) as being unpatentable over the MOST spec, in view of Jha.

10> As to claims 21 and 28, the MOST spec discloses a data telegram for transmitting data within a MOST network having a MOST standard that defines the transmission of data within the MOST network [sections 2.1 and 2.4], the data telegram comprising:

a data section containing data formatted in a first instance in accordance with an extraneous standard that is different than the MOST standard, the first region containing data formatted in a second instance in accordance with the MOST standard [section 2.5 | sections 5, 6.7, 6.8.(1-4) where : the MOST standard is compatible with a number of different protocols, the packets of which are transported to the various nodes using the MOST standard].

The MOST spec also discloses a header section having a plurality of bytes [section 5, page 31] but does not explicitly disclose that the header section has a predetermined region of which contains information specifying that the data section is formatted according to the

Art Unit: 2152

extraneous standard, that the data section has a pair of regions, or the header section contains a telegram identification portion and a telegram length portion.

11> Similar to Jha, MOST spec is directed towards transporting various data types within container structures [section 6.6, section 9 : “equipment such as multimedia computers, analog audio gateways, multimedia CD players, hi-fi audio equipment, telecommunication terminals...etc, can all be networked to interact”]. As such, one of ordinary skill in the art would realize the need for a means of identification of the data stored in the containers so the destination nodes are aware of the kind of data they are receiving. Jha discloses a network similar to MOST [a hybrid data transport over optical networks].

Specifically, Jha discloses a data section having a pair of regions, one region in the pair of regions containing the data, and the second region containing header information associated with the extraneous standard specified in the header section [Figure 7 | column 7 «lines 39-60»]. Jha discloses a header section having a predetermined region that contains information specifying that the data within the first region of the data section are formatted in the first instance according to the extraneous standard and specifying that the data within the first region of the data section are formatted in the second instance according to the host standard [column 8 «lines 49-63»], where a second region in the pair of the regions in the data section contains header information in the first instance associated with the extraneous standard specified by the information in the header section and in the second instance associated with the MOST standard specified by the information in the header section [Figure 7 | column 7 «lines 46-49»].

Jha also discloses a telegram identification portion and a telegram length portion within the header section [see claim 11 rejection, above]. The purpose of these portions are to enable the system to make appropriate decisions on how to handle the data contained within the telegram by determining the protocols and length of the packet [see Jha, Figure 11 | Figure 12].

Therefore, it would have been obvious to one of ordinary skill in the art to incorporate Jha's header functionality into MOST's header to enable identification of the multiple traffic types (standards) of the data payload. Further, it would have been obvious to incorporate Jha's data section with its pair of regions into MOST's data section to enable an increase in the data traffic capabilities of the MOST network.

12> Claim 27 is rejected under 35 U.S.C § 103(a) as being unpatentable over MOST and Jha, in further view of Flanders.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2152

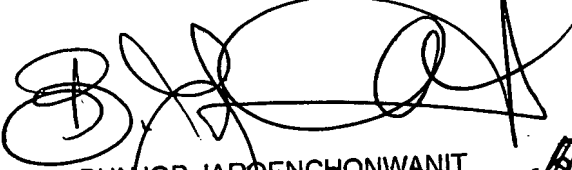
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is 571.272.3942. The examiner can normally be reached on Monday-Friday [8:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571.272.3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC


BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER
5/24/07